

National Antimicrobial Resistance Monitoring System Animal Isolates

Cattle Diagnostic* Isolates

Percent Resistance

Antimicrobial (Number of Isolates)	1997 n=183	1998 n=321	1999 n=550	2000 n=450	2001 n=347	2002 n=366	2003 n=354
Amikacin	0	0	0	0	0	0	0
Amoxicillin/Claivalanic Acid	1.6	8.1	4.5	20.4	19.6	26.5	35.3
Ampicillin	32.2	42.1	32.9	45.3	39.5	45.6	45.5
Apramycin	0.5	0.9	0.9	3.3	2.6	N/A	N/A
Cefoxitin	N/A	N/A	N/A	19.8	19.3	23.8	29.7
Ceftiofur	0.5	8.1	4.5	18.9	19.6	24.9	35.6
Ceftriaxone	0.5	2.5	0.4	0	0.3	0.8	0.6
Cephalothin	1.6	9.0	7.5	21.6	21.0	27.6	35.6
Chloramphenicol	5.5	14.3	16.0	29.6	30.8	34.4	44.1
Ciprofloxacin	0	0	0	0.2	0	0.5	0
Gentamicin	2.2	4.7	4.2	8.9	8.9	9.8	7.1
Imipenem	N/A	N/A	N/A	N/A	0	N/A	N/A
Kanamycin	29.0	36.8	26.0	34.7	26.2	30.1	26.0
Nalidixic Acid	0	0	0.2	2.0	2.0	2.2	1.4
Streptomycin	33.9	43.6	40.7	46.4	47.8	50.0	47.5
Sulfamethoxazole	30.6	43.9	34.9	43.8	46.4	44.0	46.9
Tetracycline	36.6	43.0	37.5	47.8	52.2	50.8	50.8
Ticarcillin**	31.7	39.9	N/A	N/A	N/A	N/A	N/A
Trimethoprim/Sulfamethoxazole	1.6	5.9	5.1	10.0	8.1	10.7	7.3

*Isolates obtained from the National Veterinary Service Laboratories (the majority of isolates were obtained from primary or secondary infections) and from participating Sentinel Site Diagnostic Laboratories.